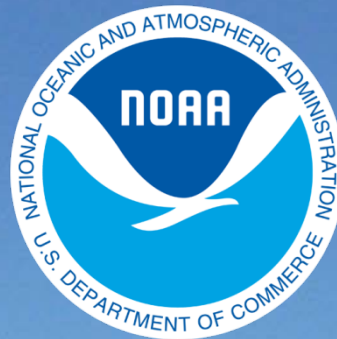


BookletChart™

Milwaukee Harbor

NOAA Chart 14924

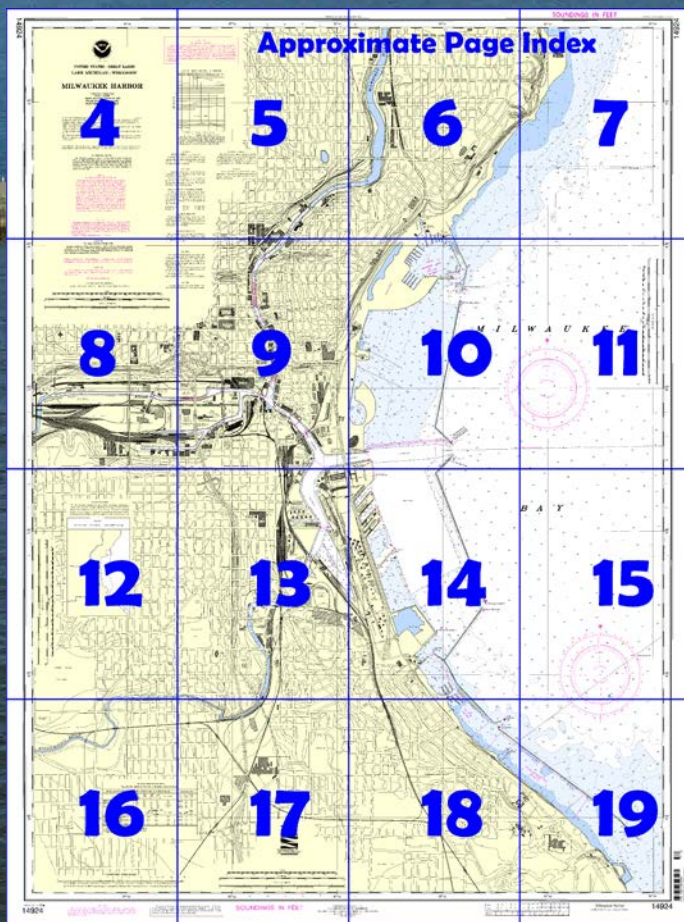


A reduced-scale NOAA nautical chart for small boaters

When possible, use the full-size NOAA chart for navigation.



- Complete, reduced-scale nautical chart
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- Convenient size
- Up-to-date with Notices to Mariners
- Compiled by NOAA's Office of Coast Survey, the nation's chartmaker



Published by the
National Oceanic and Atmospheric Administration
National Ocean Service
Office of Coast Survey
www.NauticalCharts.NOAA.gov
888-990-NOAA

What are Nautical Charts?

Nautical charts are a fundamental tool of marine navigation. They show water depths, obstructions, buoys, other aids to navigation, and much more. The information is shown in a way that promotes safe and efficient navigation. Chart carriage is mandatory on the commercial ships that carry America's commerce. They are also used on every Navy and Coast Guard ship, fishing and passenger vessels, and are widely carried by recreational boaters.

What is a BookletChart™ ?

This BookletChart is made to help recreational boaters locate themselves on the water. It has been reduced in scale for convenience, but otherwise contains all the information of the full-scale nautical chart. The bar scales have also been reduced, and are accurate when used to measure distances in this BookletChart. See the Note at the bottom of page 5 for the reduction in scale applied to this chart.

Whenever possible, use the official, full scale NOAA nautical chart for navigation. Nautical chart sales agents are listed on the Internet at <http://www.NauticalCharts.NOAA.gov>.

This BookletChart does NOT fulfill chart carriage requirements for regulated commercial vessels under Titles 33 and 44 of the Code of Federal Regulations.

Notice to Mariners Correction Status

This BookletChart has been updated for chart corrections published in the U.S. Coast Guard Local Notice to Mariners, the National Geospatial Intelligence Agency Weekly Notice to Mariners, and, where applicable, the Canadian Coast Guard Notice to Mariners. Additional chart corrections have been made by NOAA in advance of their publication in a Notice to Mariners. The last Notices to Mariners applied to this chart are listed in the Note at the bottom of page 7. Coast Pilot excerpts are not being corrected.

For latest Coast Pilot excerpt visit the Office of Coast Survey website at <http://www.nauticalcharts.noaa.gov/nsd/searchbychart.php?chart=14924>



(Selected Excerpts from Coast Pilot)
Sturgeon Bay (described with the Sturgeon Bay Ship Canal) extends about 8 miles southeast from Green Bay.
Caution.—Aids to navigation in Sturgeon Bay have been placed with respect to traversing the bay from Lake Michigan through the Sturgeon Bay Ship Canal to Green Bay.
Sherwood PointLight (44°53.6'N., 87°26.0'W.), 61 feet above the water, is shown from a white square tower with attached dwelling on the SW side of the entrance to Sturgeon Bay.

From Sherwood Point Light the shore trends southwest for 4 miles to a narrow peninsula that extends 1.2 miles northwest from shore. **Snake Island** is close off the end of the peninsula. From the northeast side of the peninsula and Snake Island, a shoal bank with depths of 2 to 18 feet extends 3.5 miles north-northeast. **Sherwood Point Shoal**, a detached 11-foot shoal marked on the north side by a lighted buoy, is off the north end of this shoal bank and 1.9 miles north-northwest of Sherwood Point. These shoals are a hazard to vessels navigating between Sturgeon Bay and the south end of Green Bay and should be given a wide berth. From Little Sturgeon Bay southwest for about 7 miles, the shore is generally deep-to, thence for 16 miles southwest to the village of **Red Banks, WI**, the shoal border is 0.25 to 1 mile wide. A detached 10-foot shoal is 1.5 miles offshore 3.5 miles north of Red Banks. The south end of Green Bay, from Red Banks to the mouth of Fox River, has depths of 18 feet and less. From **Point Sable** (44°34.7'N., 87°54.7'W.), 3 miles southwest of Red Banks, **Frying Pan Shoal**, with 1-foot depths and spots awash extends W across the Bay to Long Tail Point. A dredged deep-draft channel leads through the shoals at the south end of Green Bay to the mouth of Fox River.

Prominent features.—The most prominent objects in the approach to Green Bay are a tank 4 miles east-southeast of the mouth of Fox River, a lighted stack 1.1 miles south of the river mouth, a stack 2.1 miles northwest of the river mouth, and a tank 3.5 miles northwest of the river mouth at the town of Howard.

Green Bay Harbor Entrance Light (44°39'11"N., 87°54'04"W.), 72 feet above the water, is shown from a white conical tower on a cylindrical base on the west side of the entrance channel 9.3 miles northeast of the mouth of the Fox River; a seasonal sound signal is at light..

The dredged entrance channel leads generally southwest through the shallow water in the south end of Green Bay for about 11.5 miles to the mouth of Fox River and thence upstream for about 7.2 miles to a turning basin at De Pere. Other turning basins are on the east side of the channel 1.4 miles above the mouth, at the mouth of East River, and on the west side of the channel 3.6 miles above the mouth, just above the Canadian National Railroad bridge. (See Notice to Mariners and the latest of the chart for controlling depths.) The entrance channel is well marked by lighted ranges, lights, lighted and unlighted buoys. The river channel is marked by buoys from the second turning basin to the turning basin at De Pere.

East River empties into the east side of Fox River 1.3 miles above the mouth. The river is navigable to Baird Street bridge, 1.3 miles above the mouth. A depth of about 5 feet can be carried through the narrow and tortuous channel.

Caution.—**Grassy Island**, on the E side of the entrance channel, 1.3 miles NE of the Fox River mouth, and **Cat Island**, on the W side of the channel opposite, partially cover during periodic high-water conditions. Grassy Island is marked on the NW end by a light.

In the approaches to Fox River, outside the limits of the dredged channel, numerous uncharted fish nets and stakes make navigation hazardous, particularly for strangers.

A crescent-shaped spoil area is about 1 mile E of the mouth of Fox River.

Fluctuations of water level.—Changes in wind direction or barometric pressure occasionally cause temporary water level fluctuations of up to 2 ½ feet above or below the prevailing mean lake level.

Currents.—Currents in Fox River attain velocities to 3 mph and may run in either direction.

U.S. Coast Guard Rescue Coordination Center

24 hour Regional Contact for Emergencies

RCC Cleveland

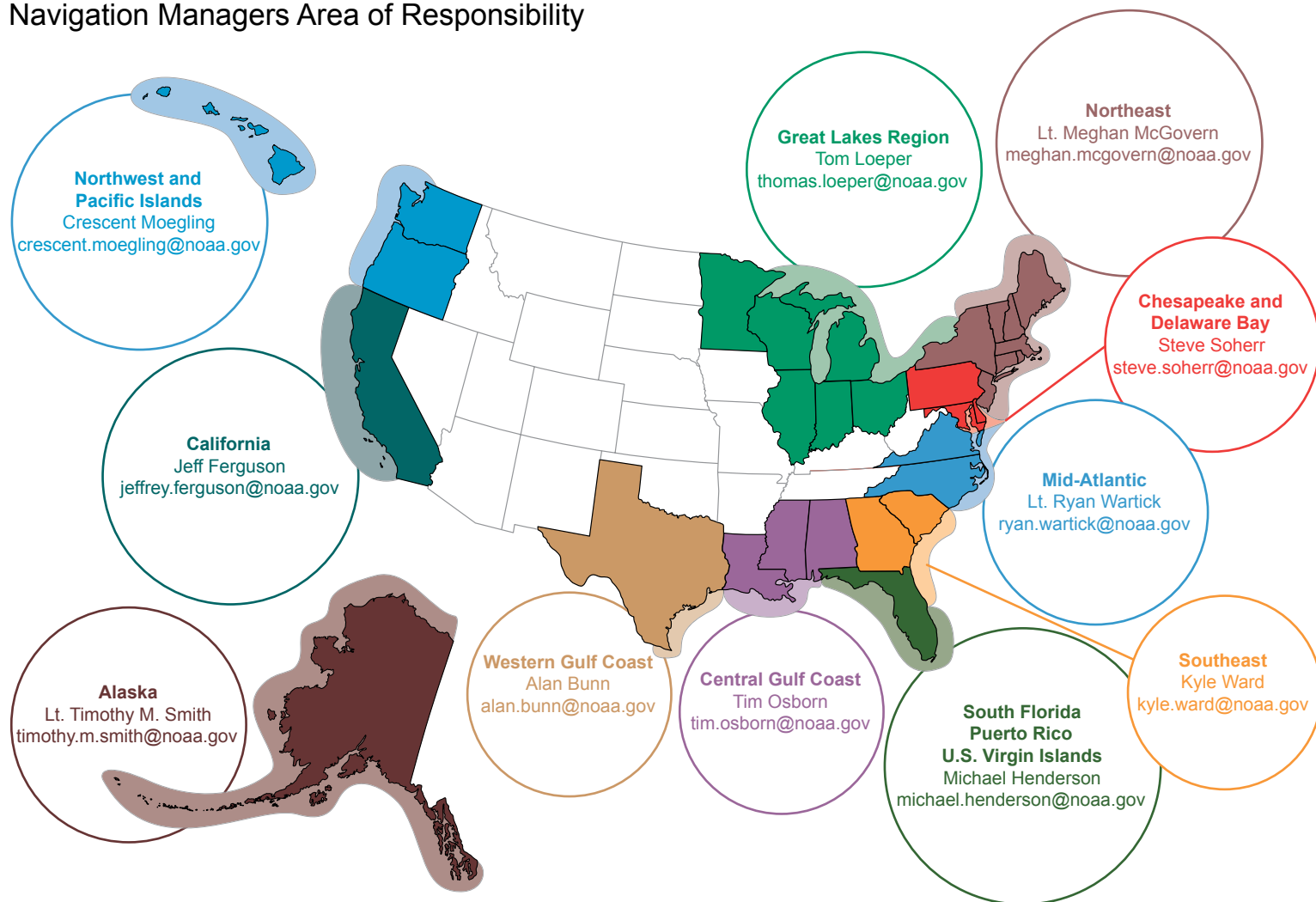
Commander

9th CG District

Cleveland, OH

(216) 902-6117

Navigation Managers Area of Responsibility



NOAA's navigation managers serve as ambassadors to the maritime community.

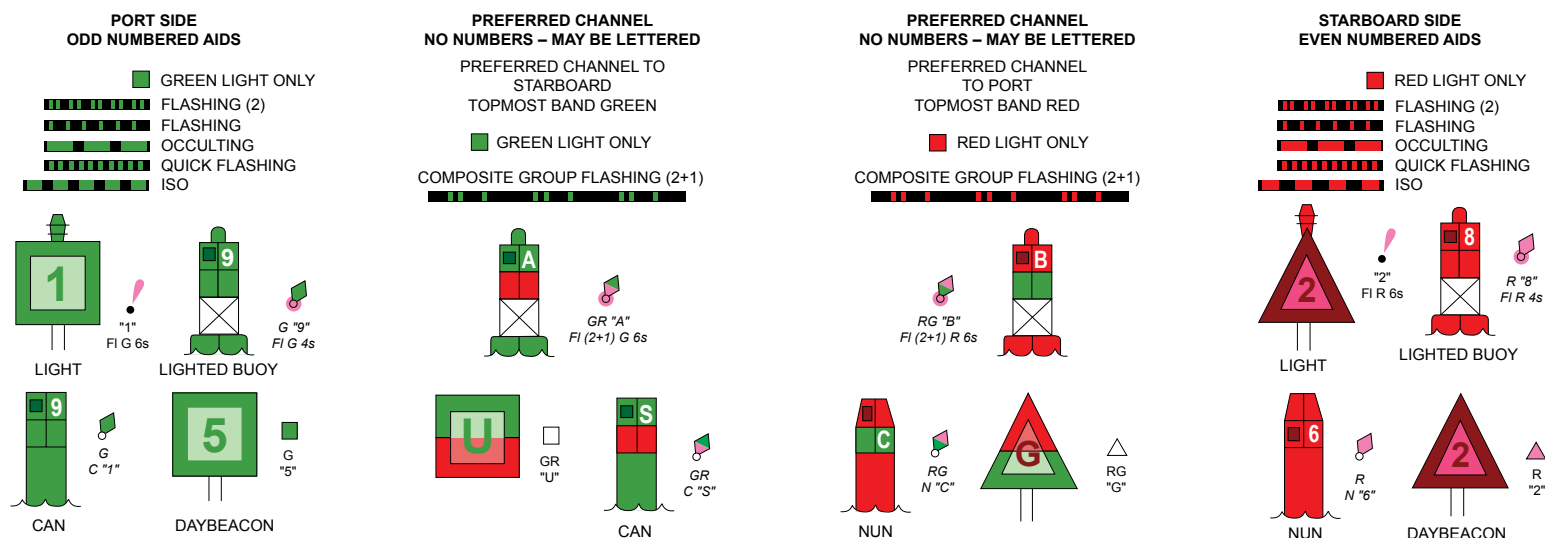
They help identify navigational challenges facing professional and recreational mariners, and provide NOAA resources and information for safe navigation. For additional information, please visit nauticalcharts.noaa.gov/service/navmanagers

To make suggestions or ask questions online, go to nauticalcharts.noaa.gov/inquiry.

To report a chart discrepancy, please use ocsdata.ncd.noaa.gov/idrs/discrepancy.aspx.

Lateral System As Seen Entering From Seaward

on navigable waters except Western Rivers



For more information on aids to navigation, including those on Western Rivers, please consult the latest USCG Light List for your area.

These volumes are available online at <http://www.navcen.uscg.gov>



THE NATION'S CHARTMAKER SINCE 1807
COAST SURVEY

UNITED STATES - GREAT LAKES
LAKE MICHIGAN - WISCONSIN

MILWAUKEE HARBOR

Polyconic Projection
Scale 1:10,000

North American Datum of 1983
(World Geodetic System 1984)

SOUNDINGS IN FEET

Additional information can be obtained at nauticalcharts.noaa.gov.

NOTES

PLANE OF REFERENCE OF THIS CHART (Low Water Datum).....577.5 ft.
Referred to mean water level at Rimouski, Quebec, International Great Lakes Datum (1985).
SAILING DIRECTIONS. Bearings of sailing courses are true and distances given thereon are in statute miles between points of departure.
AIDS TO NAVIGATION. Consult U.S. Coast Guard Light List for supplemental information concerning aids to navigation.
SYMBOLS AND ABBREVIATIONS. For complete list of symbols and abbreviations see Chart No. 1
BRIDGE AND OVERHEAD CABLE CLEARANCES. When the water surface is above Low Water Datum, bridge and overhead clearances are reduced correspondingly. For clearances see U.S. Coast Pilot 6.
AUTHORITIES. Hydrography and Topography by the National Ocean Service, Coast Survey, with additional data from the Corps of Engineers, Geological Survey and U.S. Coast Guard.

CAUTION
SUBMARINE PIPELINES AND CABLES
Charted submarine pipelines and submarine cables and submarine pipeline and cable areas are shown as:



Additional uncharted submarine pipelines and submarine cables may exist within the area of this chart. Not all submarine pipelines and submarine cables are required to be buried, and those that were originally buried may have become exposed. Mariners should use extreme caution when operating vessels in depths of water comparable to their draft in areas where pipelines and cables may exist, and when anchoring, dragging, or trawling.
Covered wells may be marked by lighted or unlighted buoys.

HORIZONTAL DATUM

The horizontal reference datum of this chart is North American Datum of 1983 (NAD 83), which for charting purposes is considered equivalent to the World Geodetic System 1984 (WGS 84). Geographic positions referred to the North American Datum of 1927 must be corrected an average of 0.053" northward and 0.308" westward to agree with this chart.

CAUTION
Improved channels shown by broken lines are subject to shoaling, particularly at the edges.

NOTE Z
NO-DISCHARGE ZONE, 40 CFR 140

This chart falls entirely within the limits of a No-Discharge Zone (NDZ). Under the Clean Water Act, Section 312, all vessels operating within a No-Discharge Zone (NDZ) are completely prohibited from discharging any sewage, treated or untreated, into the waters. Commercial vessel sewage shall include graywater. All vessels with an installed marine sanitation device (MSD) that are navigating, moored, anchored, or docked within a NDZ must have the MSD disabled to prevent the overboard discharge of sewage (treated or untreated) or install a holding tank. Regulations for the NDZ are contained in the U.S. Coast Pilot. Additional information concerning the regulations and requirements may be obtained from the Environmental Protection Agency (EPA) web site: http://www.epa.gov/owow/oceans/regulatory/vessel_sewage/.

NOTE A

Navigation regulations are published in Chapter 2, U.S. Coast Pilot 6. Additions or revisions to Chapter 2 are published in the Notice to Mariners. Information concerning the regulations may be obtained at the Office of the Commander, 9th Coast Guard District in Cleveland, Ohio or at the Office of the District Engineer, Corps of Engineers in Detroit, Michigan.
Refer to charted regulation section numbers.

Pump-out facilities

SUPPLEMENTAL INFORMATION
Consult U.S. Coast Pilot 6 for important supplemental information.

CAUTION
POTABLE WATER INTAKE

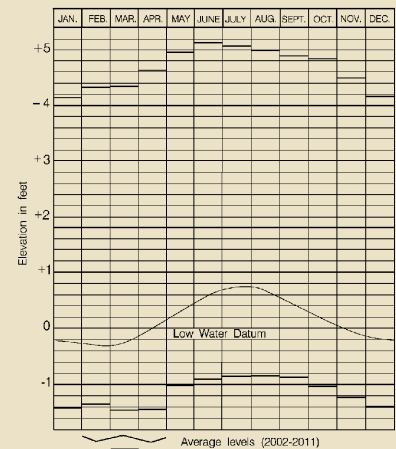
Vessels operating in fresh water lakes or rivers shall not discharge sewage, or ballast, or bilge water within such areas adjacent to domestic water intakes as are designated by the Commissioner of Food and Drugs (21 CFR 1250.93). Consult U.S. Coast Pilot 6 for important supplemental information.

Joins page 8

CAUTION
CHANGES IN BUOYAGE

Mariners are advised that authorized aids to navigation are being changed to conform to maritime standards of the International Association of Lighthouse Authorities Maritime Buoyage System, Region 5. Significant changes are: black port hand buoys to green; black and white vertically striped buoys to red and white vertically striped buoys, and lateral lights from white to red or green as appropriate. Changes to aids to navigation will be announced in the National Geospatial-Intelligence Agency weekly Notice to Mariners and the U.S. Coast Guard Local Notice to Mariners.

LAKE MICHIGAN - HURON



Low Water Datum, which is the plane of reference for the levels shown on the above hydrograph, is also the plane of reference for the charted depths. If the lake level is above or below Low Water Datum, the existing depths are correspondingly greater or lesser than the charted depths.

CAUTION
BASCULE BRIDGE CLEARANCES

For bascule bridges, whose spans do not open to a full upright or vertical position, unlimited vertical clearance is not available for the entire charted horizontal clearance.

CAUTION
Temporary changes or defects in aids to navigation are not indicated on this chart. See Local Notice to Mariners.
During some winter months or when endangered by ice, certain aids to navigation are replaced by other types or removed. For details see U.S. Coast Guard Light List.

NOAA WEATHER RADIO BROADCASTS

The NOAA Weather Radio stations listed below provide continuous weather broadcasts. The reception range is typically 20 to 40 nautical miles from the antenna site, but can be as much as 100 nautical miles for stations at high elevations.

Milwaukee, WI	KEC-60	162.400 MHz
Racine, WI	KZZ-76	162.450 MHz

POLLUTION REPORTS

Report all spills of oil and hazardous substances to the National Response Center via 1-800-424-8602 (toll free), or to the nearest U.S. Coast Guard facility if telephone communication is impossible (33 CFR 153).

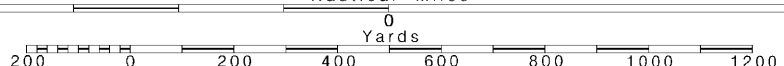
RADAR REFLECTORS

Radar reflectors have been placed on many floating aids to navigation. Individual radar reflector identification on these aids has been omitted from this chart.

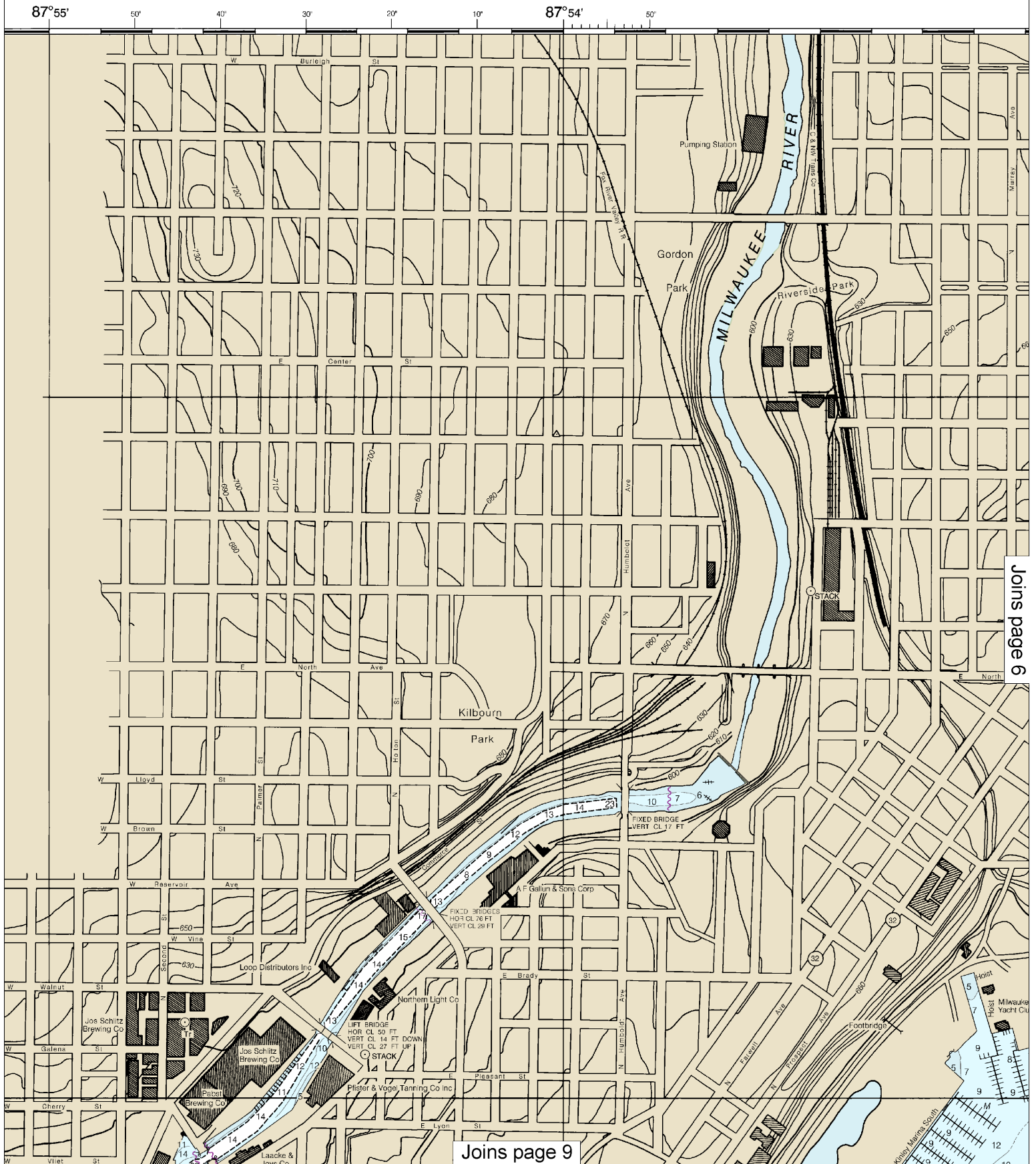
CAUTION
Limitations on the use of radio signals as

Printed at reduced scale. SCALE 1:10,000
Nautical Miles

See Note on page 5.



Note: Chart grid lines are aligned with true north.



This BookletChart was reduced to 75% of the original chart scale.
The new scale is 1:13333. Barscales have also been reduced and
are accurate when used to measure distances in this BookletChart.



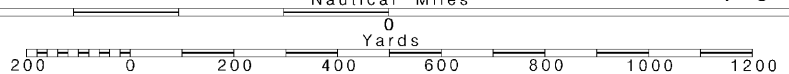
6

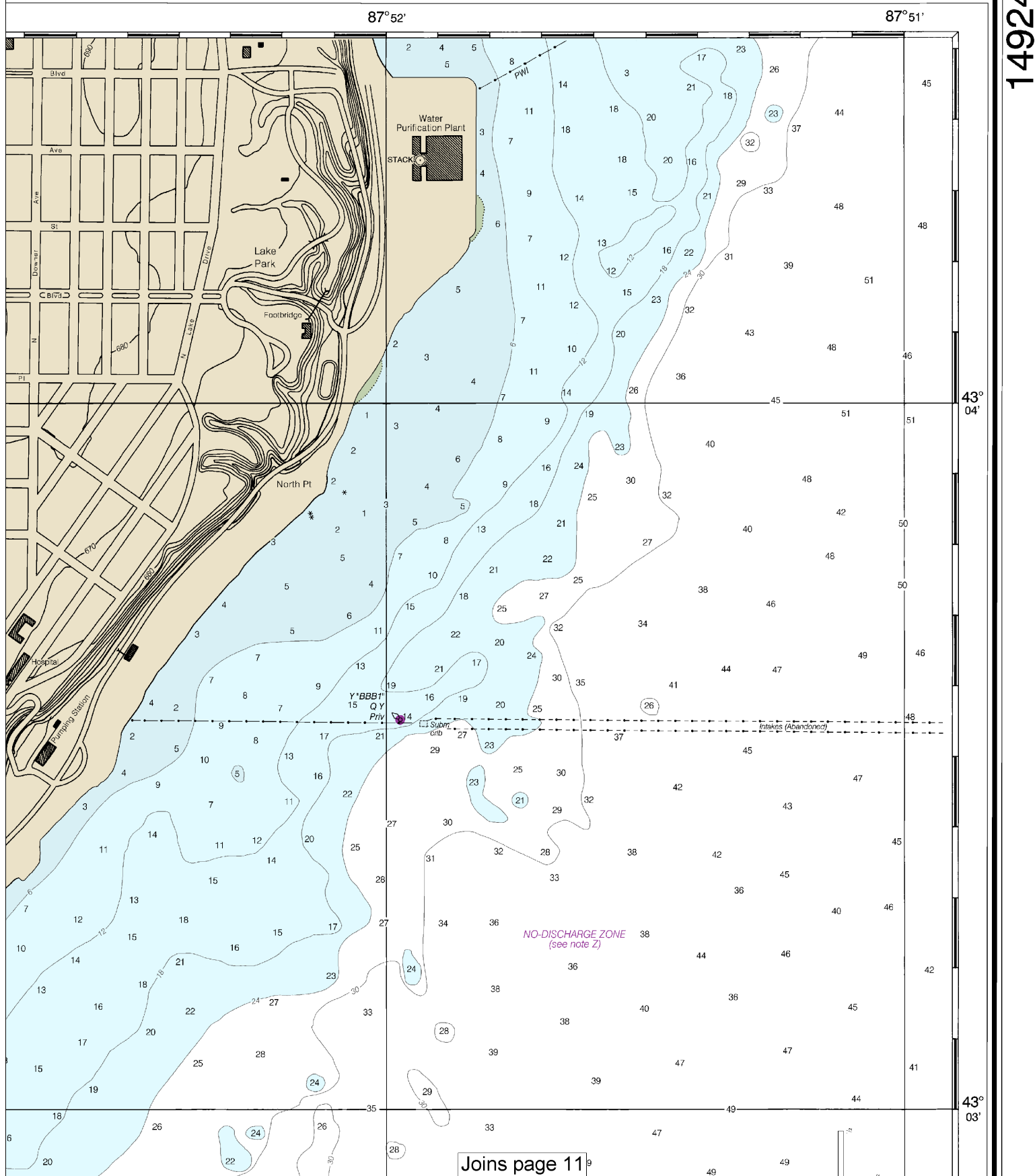
Note: Chart grid lines are aligned with true north.

Printed at reduced scale.

SCALE 1:10,000

See Note on page 5.





Last Correction: 6/10/2016. Cleared through:
 LNM: 4616 (11/15/2016), NM: 4616 (11/12/2016), CHS: 1016 (10/28/2016)

subject to shoaling, particularly at the edges.

Joins page 4

43°
03'

CAUTION
POTABLE WATER INTAKE

Vessels operating in fresh water lakes or rivers shall not discharge sewage, or ballast, or bilge water within such areas adjacent to domestic water intakes as are designated by the Commissioner of Food and Drugs (21 CFR 1250.93). Consult U.S. Coast Pilot 6 for important supplemental information.

Sailing courses and limits indicated in magenta are recommended by the Lake Carriers Association and the Canadian Shipowners Association.

WARNING

The prudent mariner will not rely solely on any single aid to navigation, particularly on floating aids. See U.S. Coast Guard Light List and U.S. Coast Pilot 6 for details.

RADAR REFLECTORS

Radar reflectors have been placed on many floating aids to navigation. Individual radar reflector identification on these aids has been omitted from this chart.

CAUTION

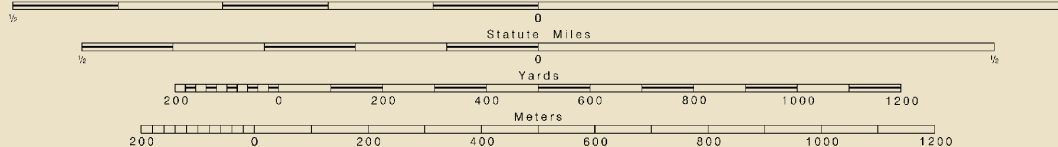
Limitations on the use of radio signals as aids to marine navigation can be found in the U.S. Coast Guard Light Lists and National Geospatial-Intelligence Agency Publication 117.

Radio direction-finder bearings to commercial broadcasting stations are subject to error and should be used with caution.

Station positions are shown thus:

○ (Accurate location) ○ (Approximate location)

SCALE 1:10,000
Nautical Miles



43°
02'

50'

40'

30'

Joins page 12

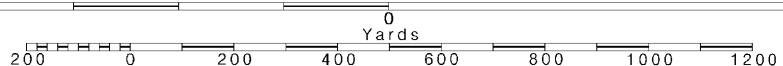
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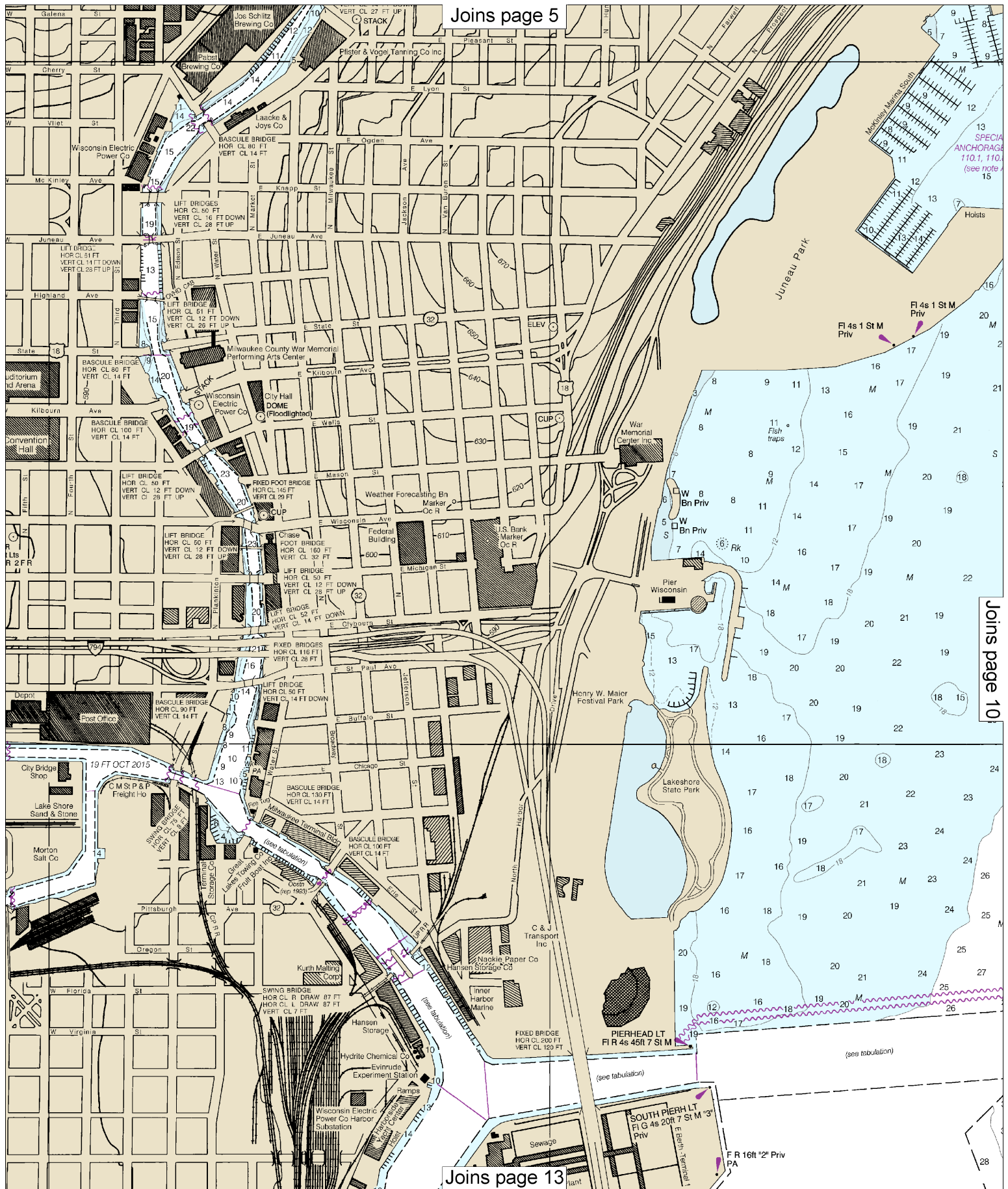
Note: Chart grid lines are aligned with true north.

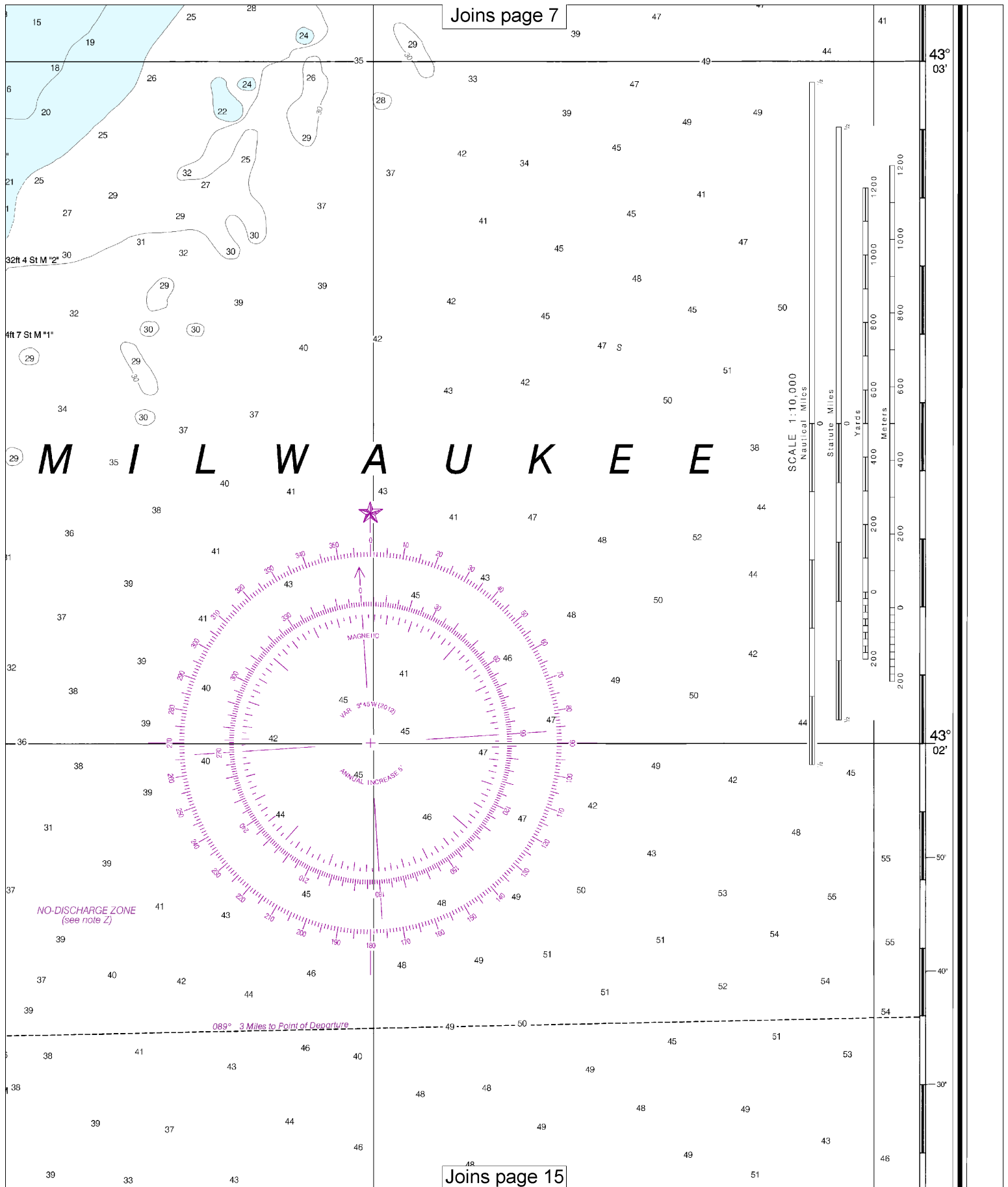
Printed at reduced scale.

SCALE 1:10,000
Nautical Miles

See Note on page 5.







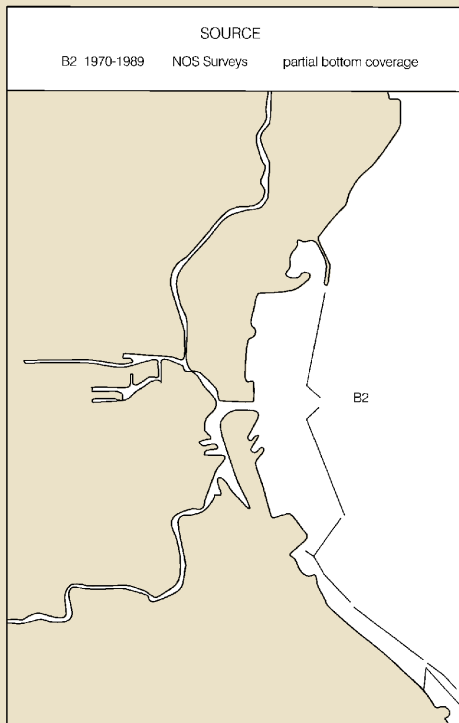
Joins page 8

SOURCE DIAGRAM

The outlined areas represent the limits of the most recent hydrographic survey information that has been evaluated for charting. Surveys have been banded in this diagram by date and type of survey. Channels maintained by the U.S. Army Corps of Engineers are periodically resurveyed and are not shown on this diagram. Refer to Chapter 1, United States Coast Pilot.

SOURCE

B2 1970-1989 NOS Surveys partial bottom coverage



Joins page 16

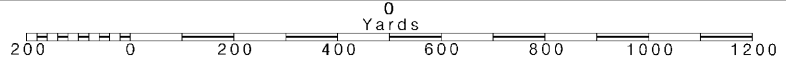
12

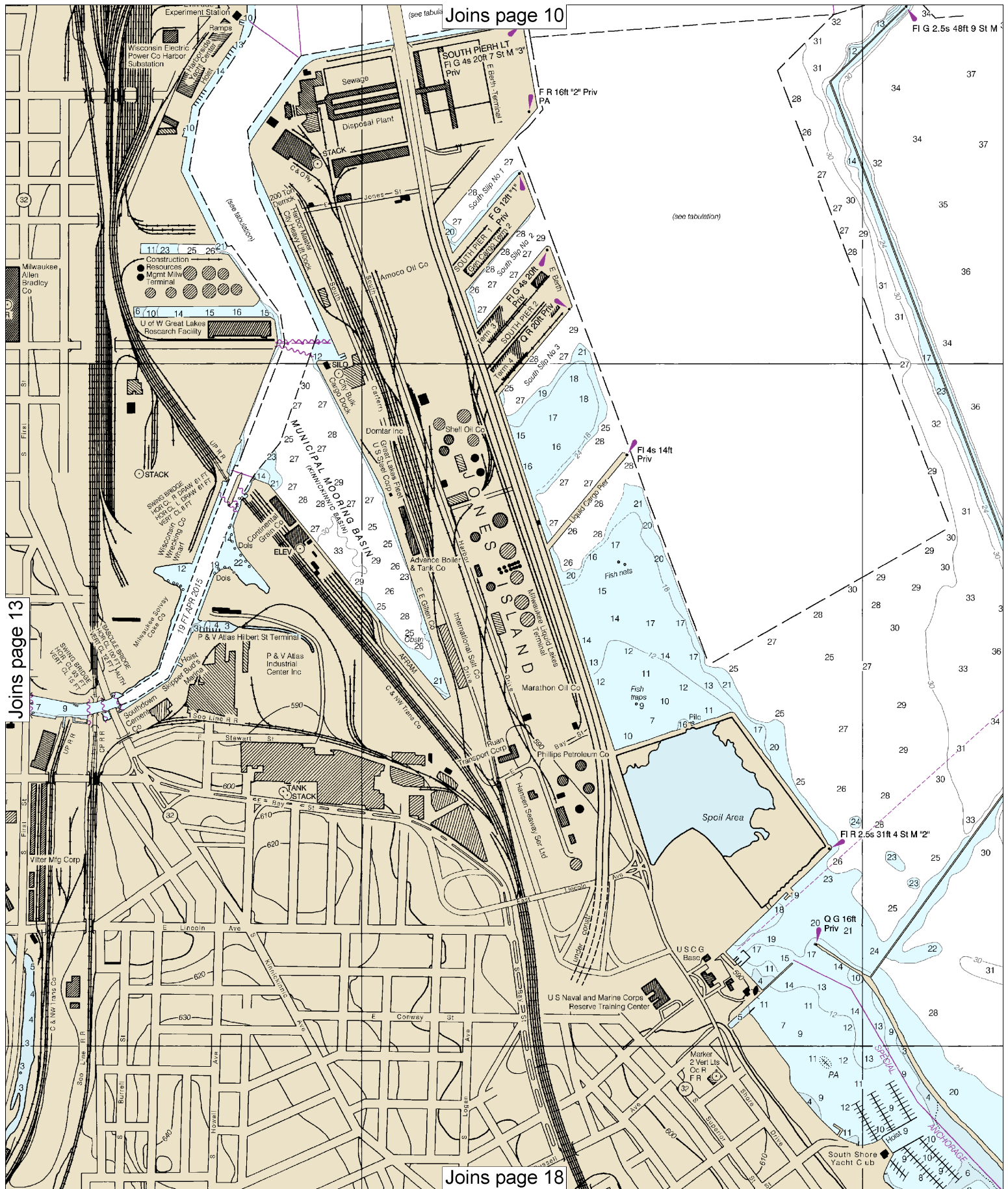
Note: Chart grid lines are aligned with true north.

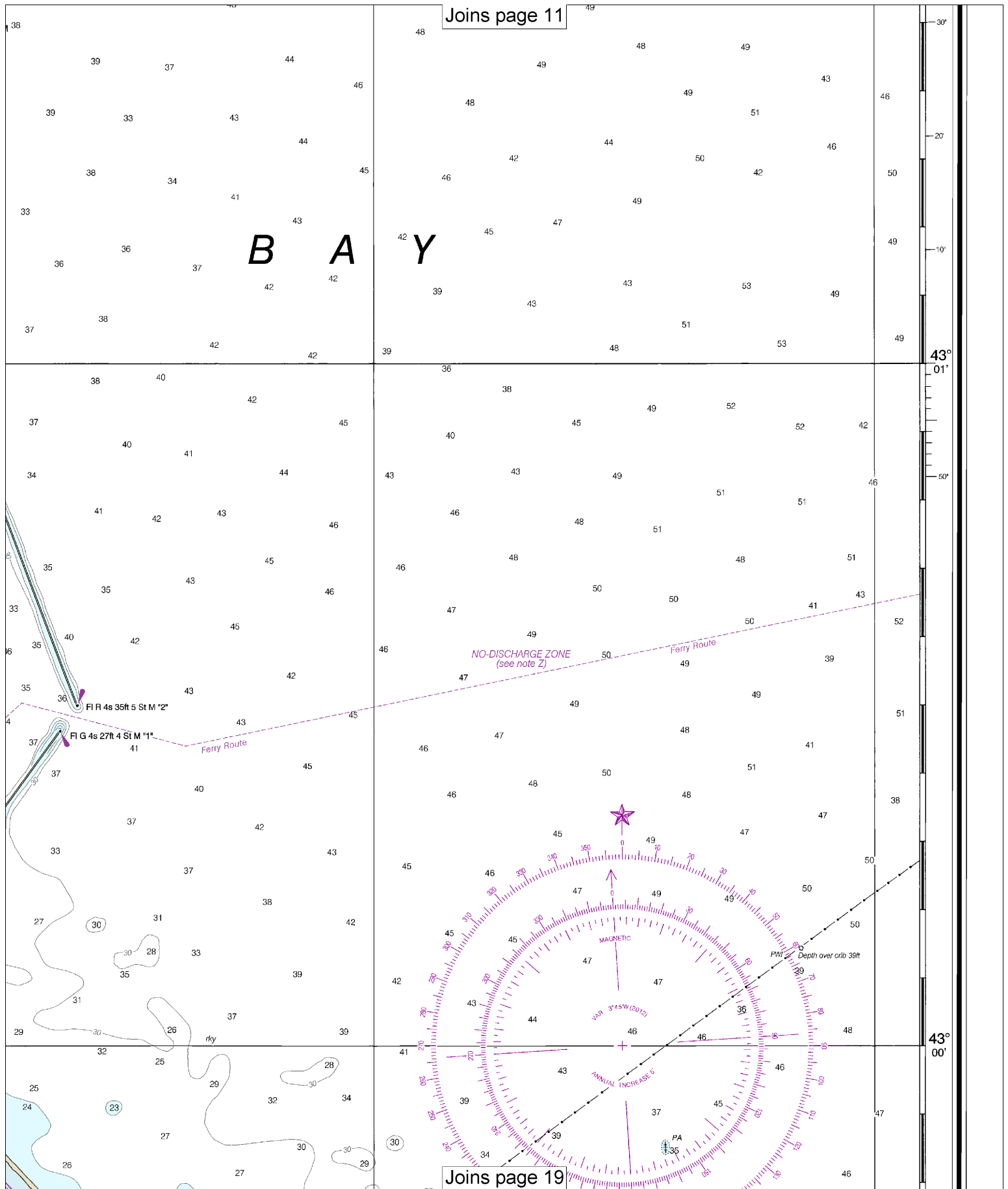
Printed at reduced scale.

SCALE 1:10,000
Nautical Miles

See Note on page 5.







42°
59'

87° 56'

MILWAUKEE HARBOR CHANNEL DEPTHS									
TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - SURVEYS TO OCT 2015									
CONTROLLING DEPTHS FROM SEAWARD IN FEET AT GREAT LAKES LOW WATER DATUM (LWD)						PROJECT DIMENSIONS			
ENTRANCE CHANNELS		LEFT OUTSIDE QUARTER	LEFT INSIDE QUARTER	RIGHT INSIDE QUARTER	RIGHT OUTSIDE QUARTER	DATE OF SURVEY	WIDTH (FEET)	LENGTH (MILES)	DEPTH LWD (FEET)
ENTRANCE TO END OF BKW		32.0	32.1	31.6	31.1	4-15	800-300	0.23	30
BKW TO PIER-HEAD LT		27.8	28.4	26.3	21.0	4-15	600	0.53	26
S. HARBOR AREA		25.8	27.5	27.8	27.7	10-15	2300	1.0	26
PIER-HEAD LT TO PT AT 43°01'29"N 087°54'08" W		23.4	29.2	24.5	22.7	4-15	250-450	0.35	27
RIVER CHANNELS		LEFT OUTSIDE QUARTER	MIDDLE HALF	RIGHT OUTSIDE QUARTER	DATE OF SURVEY	WIDTH (FEET)	LENGTH (MILES)	DEPTH LWD (FEET)	
KINNICKINNIC R. PT AT 43°01'29"N 087°54'11"W		21.0A	23.8B	22.7C	4-15	400-180	0.8	27	
SOUTH TO FIRST RR BRIDGE		16.9	16.9	17.1	4-15	400-250	0.23	27	
MILWAUKEE R. PT AT 43°01'29"N 087°54'11"W									
NORTH TO FIRST RR BRIDGE									
FIRST RR BRIDGE TO SECOND ST BRIDGE		11.3	14.9	11.6	4-15	250-100	0.53	21	
A. SHOALING TO 20.5 FEET WITHIN THE LAST 100 FEET OF REACH B. SHOALING TO 21.1 FEET WITHIN THE LAST 100 FEET OF REACH C. SHOALING TO 20.9 FEET WITHIN THE LAST 100 FEET OF REACH									

29th Ed., Dec./ 2012

14924

CAUTION

This chart has been corrected from the Notice to Mariners (NM) published weekly by the National Geospatial-Intelligence Agency and the Local Notice to Mariners (LNM) issued periodically by each U.S. Coast Guard district to the dates shown in the lower left hand corner. Chart updates corrected from Notice to Mariners published after the dates shown in the lower left hand corner are available at nauticalcharts.noaa.gov.

NOAA encourages users to submit inquiries, discrepancies or comments about this chart at <http://www.nauticalcharts.noaa.gov/staff/contact.htm>.

Last Correction: 6/10/2016. Cleared through:
LNM: 4616 (11/15/2016), NM: 4616 (11/12/2016), CHS: 1016 (10/28/2016)

16

Note: Chart grid lines are aligned with true north.

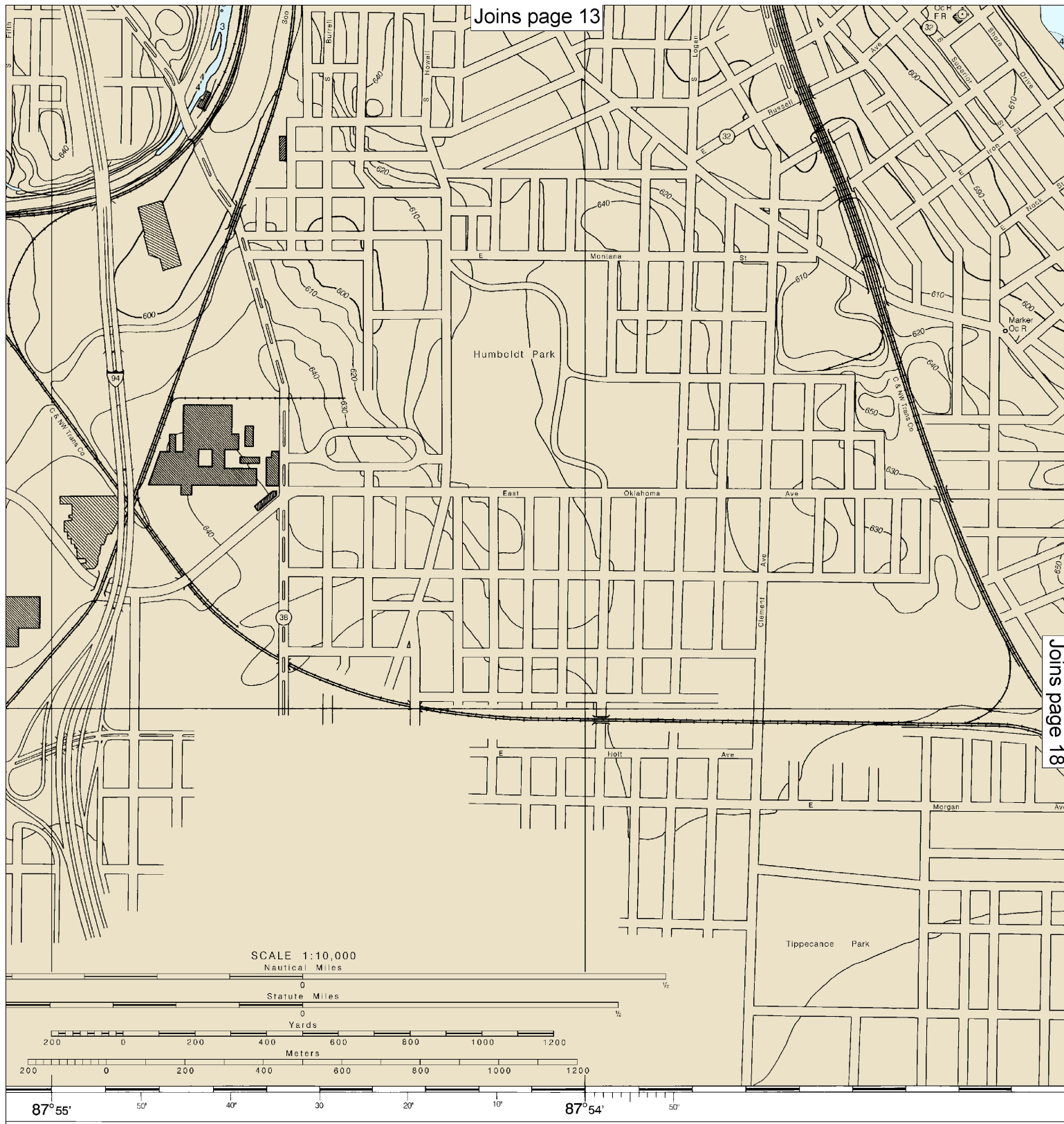
Printed at reduced scale.

SCALE 1:10,000
Nautical Miles

See Note on page 5.

0
Yards
200 0 200 400 600 800 1000 1200

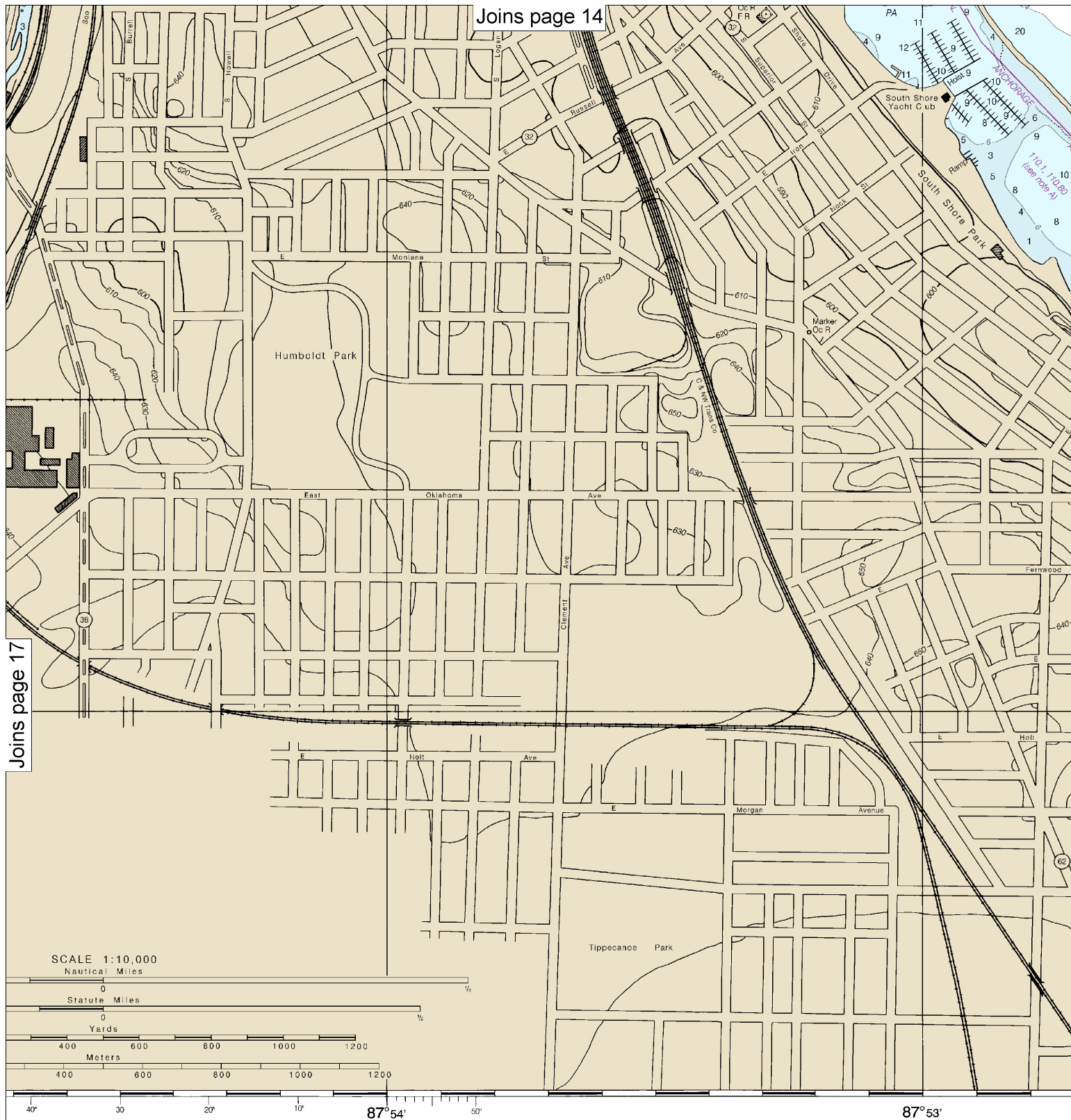
Joins page 13



Joins page 18

SOUNDINGS IN FEET

Published at Washington, D.C.
U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEAN SERVICE
COAST SURVEY



NGS IN FEET

Published at Washington, D.C.
U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEAN SERVICE
COAST SURVEY

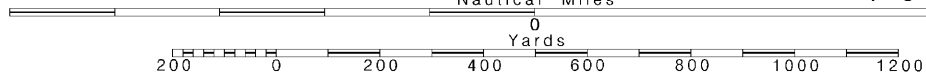
18

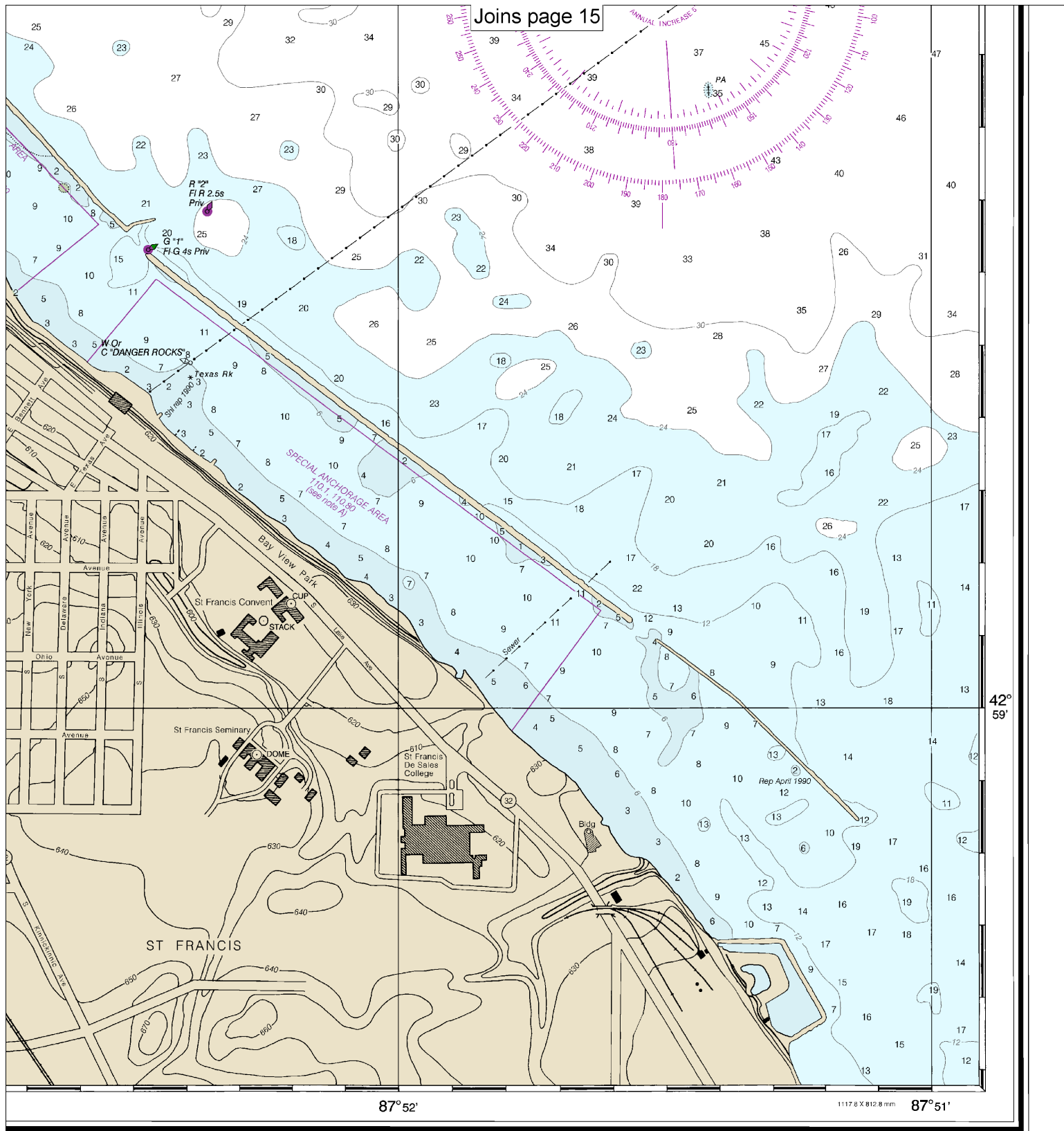
Note: Chart grid
lines are aligned
with true north.

Printed at reduced scale.

SCALE 1:10,000

See Note on page 5.





FATHOMS	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
FEET	6	12	18	24	30	36	42	48	54	60	66	72	78	84	90	96	102
METERS	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17

Milwaukee Harbor
SOUNDINGS IN FEET - SCALE 1:10,000

14924



VHF Marine Radio channels for use on the waterways:

Channel 6 – Inter-ship safety communications.

Channel 9 – Communications between boats and ship-to-coast.

Channel 13 – Navigation purposes at bridges, locks, and harbors.

Channel 16 – Emergency, distress and safety calls to Coast Guard and others, and to initiate calls to other

vessels. Contact the other vessel, agree to another channel, and then switch.

Channel 22A – Calls between the Coast Guard and the public. Severe weather warnings, hazards to navigation and safety warnings are broadcast here.

Channels 68, 69, 71, 72 and 78A – Recreational boat channels.

Getting and Giving Help — Signal other boaters using visual distress signals (flares, orange flag, lights, arm signals); whistles; horns; and on your VHF radio. You are required by law to help boaters in trouble. Respond to distress signals, but do not endanger yourself.



NOAA Weather Radio All Hazards (NWR) is a nationwide network of radio stations broadcasting continuous weather information directly from the nearest National Weather Service office. NWR broadcasts official Weather Service warnings, watches, forecasts and other hazard information 24 hours a day, 7 days a week.

<http://www.nws.noaa.gov/nwr/>

Distress Call Procedures

- Make sure radio is on.
- Select Channel 16.
- Press/Hold the transmit button.
- Clearly say: "MAYDAY, MAYDAY, MAYDAY."
- Also give: Vessel Name and/or Description; Position and/or Location; Nature of Emergency; Number of People on Board.
- Release transmit button.
- Wait for 10 seconds — If no response Repeat MAYDAY call.

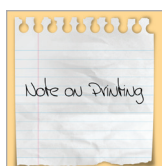
HAVE ALL PERSONS PUT ON LIFE JACKETS!

Quick References

Nautical chart related products and information	— http://www.nauticalcharts.noaa.gov
Interactive chart catalog	— http://www.charts.noaa.gov/InteractiveCatalog/nrnc.shtml
Report a chart discrepancy	— http://ocsddata.ncd.noaa.gov/idrs/discrepancy.aspx
Chart and chart related inquiries and comments	— http://ocsddata.ncd.noaa.gov/idrs/inquiry.aspx?frompage=ContactUs
Chart updates (LNM and NM corrections)	— http://www.nauticalcharts.noaa.gov/mcd/updates/LNM_NM.html
Coast Pilot online	— http://www.nauticalcharts.noaa.gov/nsd/cpdownload.htm
Tides and Currents	— http://tidesandcurrents.noaa.gov
Marine Forecasts	— http://www.nws.noaa.gov/om/marine/home.htm
National Data Buoy Center	— http://www.ndbc.noaa.gov/
NowCoast web portal for coastal conditions	— http://www.nowcoast.noaa.gov/
National Weather Service	— http://www.weather.gov/
National Hurricane Center	— http://www.nhc.noaa.gov/
Pacific Tsunami Warning Center	— http://ptwc.weather.gov/
Contact Us	— http://www.nauticalcharts.noaa.gov/staff/contact.htm



— For the latest news from Coast Survey, follow **@NOAAcharts**



This Booklet chart has been designed for duplex printing (printed on front and back of one sheet). If a duplex option is not available on your printer, you may print each sheet and arrange them back-to-back to allow for the proper layout when viewing.